Section VII

INTERNATIONAL

This section contains transportation and related data for selected countries. Basic socioeconomic data is provided to establish a framework for the transportation indicators that follow. These include information about each country's network of roadways, ownership and use of roadway vehicles, including the fatalities attributable to those vehicles, and fuel prices. Topics were chosen to correspond with major topics presented elsewhere in this volume. However, the availability of reliable information was also a consideration in selecting topics; therefore, some useful areas, such as certain transportation expenditures, were not covered because of the unavailability of complete and comparable data from an array of countries that could readily be converted to meaningful indicators. Except as noted, data is for the calendar year 1991, which was the most recent year in which it is available for many countries.

Countries were selected, as other developed counties and/or major U.S. trading partners, for comparisons with the U.S. system. Japan, four European countries and our North American Free Trade Agreement (NAFTA) trading partners were chosen as examples of these.

Much of the data came from reliable published sources; these sources are noted with the individual tables. Because of the reunification of Germany just prior to the data year, the German Embassy was asked to provide data for the unified country. Most of the German data came from that source. Much of the data on the United Kingdom is for Great Britain only, which does not include Northern Ireland. U.S. data came from Highway Statistics 1991 or directly from other Federal Highway Administration sources.

Table IN-1 sets forth indicators of social and demographic status for each country, including size, population, land area, population density, and economic status. These are shown for 1991 in order to correspond with the transportation data. The gross domestic product (GDP) and GDP per capita dollar amount estimates for each country are stated in terms of purchasing power equivalents. This method involves the use of dollar price weights applied to the quantities of goods and services produced by the economy. With this method of conversion, a given sum of dollars in the U.S. will buy the same amount of goods as that amount, converted to the local currency, will buy in the other country. While

population, land area, population density, and GDP vary greatly among the countries, GDP per capita varies only slightly among seven of the eight countries. Mexico is less economically developed than the others and varies from them in all important indicators.

Table IN-2 provides information on roadway systems. Expressways and other main roadways are grouped together under "major roads" while all others are considered "secondary roads." These are only general categories, as the definitions and data collection processes vary from country to country. The tables show that land area and population density are important indicators of highway miles in each country, although Mexico's less developed status is apparent in measures of miles per capita.

Table IN-3 shows the numbers of several types of vehicles, vehicles per capita, and vehicle-related fatalities in each country. Some countries count only selected populations of trucks, and possibly use varying methods for counting other vehicle types as well. Although all known variations between data are noted in footnotes, it is possible that some were not apparent from the original data sources and so are not noted.

Table IN-4, together with the miles-traveled data, presents a display of the intensity of vehicle usage. Fuel costs are also shown. These vary widely between countries and reflect full costs including applicable taxes. Over 50 percent of gasoline prices in the European countries can be attributed to taxes. While diesel fuel taxes are less than those on gasoline they are substantial by comparison with those imposed in the United States.

Figure 1 sets forth in graphic form basic social and demographic information along with basic highway indicators derived from the preceding tables. Most striking is the wide variety in population density. Nearly as striking is roads per square mile, which is somewhat parallel in structure to population density. Total automobile vehicle miles traveled corresponds most directly with population but is clearly influenced by other indicators as well. Except for Mexico, all countries have similar GDP per capita. The patterns for gas cost and automobiles per capita are also noteworthy.

SOCIAL AND DEMOGRAPHIC CHARACTERISTICS FOR SELECTED COUNTRIES

1991

TABLES IN-1

	ASIA			EUROPE				OCTOBER 1994 AMERICA		
	JAPAN	FRANCE	GERMANY	SWEDEN	UNITED KINGDOM	CANADA	MEXICO	UNITED STATES		
Population	124,017,137	56,595,587	80,274,600	8,564,317	57,515,307	26,835,036	90,007,304	252,502,000		
Land Area (square miles)	144,689	210,669	134,950	158,660	93.278	3,560,236	742,490	3,536,338		
Population Density (persons per square mile)	857.1	268.6	594.8	54.0	616.6	7.5	121.2	71.4		
GDP (billion \$) (purchasing power equivalent)	\$2,360.7	\$1,033.7	\$1,331.4	\$147.6	\$915.5	\$521.5	\$289.0	\$5,673.0		
GDP per Capita (\$)	\$19,035	\$18,265	\$16,586	\$17,234	\$15,918	\$19,434	\$3,211	\$22,467		

Source: Prepared from The World Factbook, 1991 and 1992, Central Intelligence Agency, Washington, D.C.

ROAD SYSTEM MEASURES FOR SELECTED COUNTRIES 1991

TABLES IN-2 OCTOBER 1994

	ASIA		SIE SIE	FUROPE			AMFRICA	OCTOBER 1994
	JAPAN	FRANCE	GERMANY	SWEDEN	UNITED	CANADA	MEXICO	UNITED
Major Roads					KINGDOM:			SIAIES
Total Miles	32,230	22,214	32,981	6,639	6,605	92,984	30,429	191,072
Major Roads Miles per 1000 Persons	0.26	0.39	0.41	1.13	0.17	3.47	0.34	0.76
Major Roads Miles per Square Mile	0.22	0.11	0.24	90:0	0.11	0.03	0.0d	0.06
Secondary Roads Total Miles	664,003	481,563	362,386	75,361	214,120	434,811	120,125	3,698,227
Secondary Roads Miles per 1000 Persons	5.35	8.51	4.51	8.80	3.82	16.20	1.2k	14.65
Secondary Roads Miles per Square Mile	4.59	2.29	2.69	0.48	2.41	0.12	0.16	1.05
All Roads Total Miles	696,233	503,777	395,367	85,000	223,724	527,795	150,555	3,889,299
All Roads Miles per 1000 Persons	5.61	8.90	4.93	6.93	4.00	19.67	1.67	15.40
All Roads Miles per Square Mile	4.81	2.39	2.93	0.54	2.52	0.15	0.20	1.10
Road Investment As % of GDP	N/A	0.7	0.9	0.1	0.0	N/A	N/A	0.6

Sources: Prepared from "World Road Statistics," International Road Federation, 1992; "Highway Statistics," 1991 and 1992, FHWA; and information provided by the Federal Republic of Germany.

¹ The data in this column, except for Road Investment, do not include Northern Ireland.

TRANSPORTATION INDICATORS FOR SELECTED COUNTRIES 1991

TABLES IN-3 OCTOBER 1994

	ASIA		EURG	OPE			AMERICA	
	JAPAN	FRANCE	GERMANY	SWEDEN	UNITED KINGDOM ¹	CANADA	MEXICO	UNITED STATES
Number of Automobiles	37,076,065	23,810,000	36,952,000	3,621,114	19,737,000	13,061,084	7,332,118	142,955,623
Number of Motorcycles and Mopeds	17,295,204	3,160,000	3,405,000	103,000	750,000	324,118	218,698	4,177,037
Number of Buses	248,258	70,000	90,000	14,538	109,000	64,208	<i>9</i> 8,216	631,279
Number of Trucks ²	22,782,064	4,950,000	7,270,000	955,516	3,915,000	6,823,317	3,290,212	44,785,033
Automobiles per 1000 Persons	299.0	420.7	460.3	422.8	352.5	486.7	81.5	566.2
Motorcycle and Mopeds per 1000 Persons	139.5	55.8	42.4	12.0	13.4	12.1	2.4	16.5
Buses per 1000 Persons	2.0	1.2	1.1	1.7	2.0	2.4	1.1	2.5
Trucks per 1000 Persons ²	183.7	87.5	90.6	111.6	69.9	254.3	36.6	177.4
Fatalithes	11,105	9,617	11,300	623	4,568	3,684	5,700	41,462
Fatality Rate per 100 Million Vehicle Miles	2.7	3.5	3.5	2.3	1.8	2.0	17.6	1.9

Sources: Prepared from "World Road Statistics," International Road Federation, 1992; "Highway Statistics," 1991 and 1992, FHWA; and Information provided by the Embassy of the Federal Republic of Germany.

¹ The data in this column do not include Northern Ireland.

² The data for Mexico excludes tractor trailers.

VEHICLE TRAVEL AND FUEL PRICE STATISTICS FOR SELECTED COUNTRIES

1991

TABLE IN-4 OCTOBER 1994

	ASIA		EURC	OPE			AMERICA	
	JAPAN	FRANCE	GERMANY	SWEDEN ²	UNITED KINGDOM	CANADA ²	MEXICO ³	UNITED STATES
Total Vehicle Miles of Travel		!						
Cars (In millions)	240,480	201,946	288,378	26,999	208,277	138,164	21,887	1,533,552
Total Vehicle Miles of Travel								
Motorcycles (in millions)	N/A	4,039	6,959	N/A	3,355	743	789	9,178
Total Vehicle Miles of Travel							Ĭ	
Buses (in millions)	4,465	2,485	2,734	N/A	2,970	1,278	325	5,743
Total Vehicle Miles of Travel								
Trucks (in millions)	163,486	65,244	26,905	N/A	41,135	48,340	9,401	623,125
Average Vehicle Miles of								
Travel per Car	6,486	8,482	7,804	7,456	10,553	10,578	2,985	10,727
Average Vehicle Miles of						;		
Travel per Motorcycle	N/A	1,278	2,044	N/A	4,474	2,291	3,608	2,197
Average Vehicle Miles of								
Travel per Bus	17,984	35,507	30,378	N/A	27,249	19,907	3,309	9,097
Average Vehicle Miles of								
Travel per Truck	7,176	13,181	16,208	N/A	10,507	7,085	2,857	13,914
1991 Gasoline Price								
Current \$/gallon4	\$3.90	\$3.86	\$2.87	\$4.45	\$2.55	\$2.06	N/A	\$1.43
1991 Diesel Price								
Current \$/gallon	\$2.40	N/A	\$2.67	\$3.58	N/A	\$1.98	N/A	\$0.91

Sources: Prepared from "World Road Statistics," International Road Federation, 1992; "Highway Statistics," 1991 and 1992, FHWA; "North American Transportation" The Brueau of Transportation Statistics; "Transportation Energy Data Book, Edition 14," Oak Ridge National Laboratory; and Information provided by the Federal Republic of Germany.

¹ The data in this column on trucks includes only straight, nonagricultural trucks. Data on fuel prices is for West Germany only.

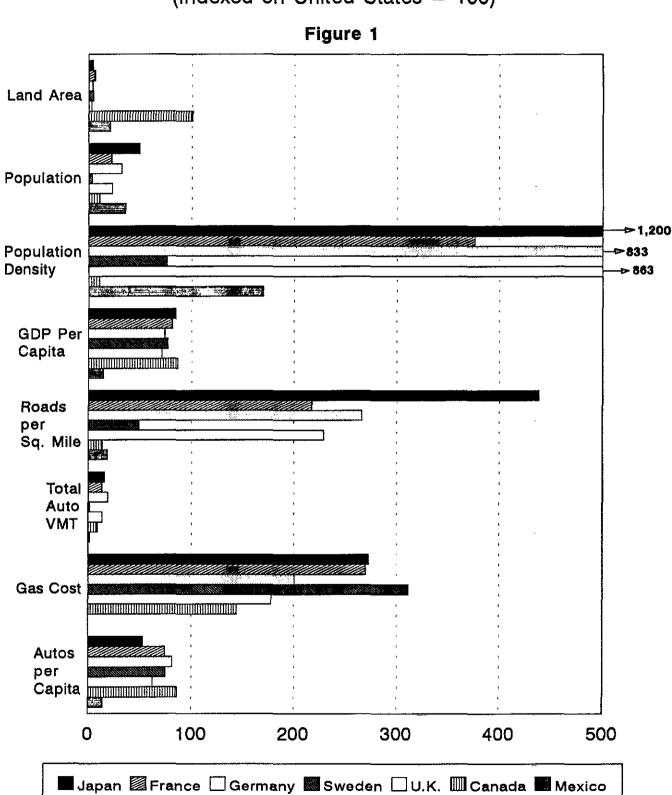
² The data in this column on vehicle miles is for 1990.

³ The data in this column on vehicle miles is for 1989.

⁴ Prices represent the retail price for premium leaded gasoline except for Canada, Japan, and the United States where the price for regular unleaded gasoline is used.

International Comparisons of Key Variables

(Indexed on United States = 100)



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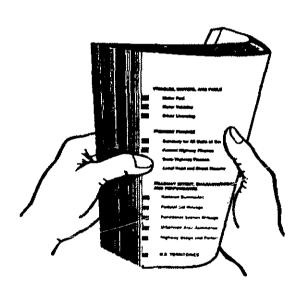
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